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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,574	06/23/2003	Kinya Aota	503.35255VX4	9655

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ARLINGTON, VA 22209-3873

EXAMINER
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BEVERIDGE, RACHEL E

ART UNIT	PAPER NUMBER
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1725

NOTIFICATION DATE	DELIVERY MODE
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07/27/2007

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	Application No. 10/600,574	Applicant(s) AOTA ET AL.	
	Examiner Rachel E. Beveridge	Art Unit 1725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 01 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-3, 6-15 and 18-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-15, and 18-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 23-25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In the instant case, each claim recite, "substantially uniform width," "substantially uniform height," and "substantially perpendicular" however applicant has no support for such a broad range in his specification. Instead, applicant only has support for "uniform width," "uniform height," and "perpendicular," respectively.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 26 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 26 recites the limitation "said third plate" in line 1. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 6-15, and 18-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mochizuki et al. (JP 2-246863) in view of Midling et al. (WO 95/26254). Mochizuki et al. teach an end portion of said hollow member, which is capable of being used in friction stir welding, the hollow frame member has a raised portion (figure 2, item 27e) which projects to an outer side in a thickness direction (vis a vis figure 2, item 27c and the opposite side) of said hollow frame member from one side of the face of said hollow frame member, extending beyond said one side face in said thickness direction (see figure 2, where thickness direction is along a direction perpendicular to plates 27b and 27a on the other plate and where element 27e extends along the thickness direction due to the width or thickness of the element 27e, noting that the width of the plates 27a,b including the raised portion 27e "extends" along the thickness direction), and is provided integrally on said end portion of the hollow frame member (figure 2, item 27a and 27b); said raised portion of said hollow frame member is capable of having a rotary tool and where during the welding the material of the raised portion is capable of filling the gaps; having a first and second plate, which is substantially parallel to the first plate (figure 2, 1 first and 2 second parallel plates 27b and 27a); a third plate connecting said first plate and second plate and a raised portion

integrally provided on an end portion of the first plate (figure 2, item 27c), said raised portion projects to an outer side in a thickness direction of said first plate from one side of said first plate (vis a vis figure 2, item 27c and the opposite side); said raised portion of said first plate is a portion capable of having a rotary tool inserted therein in a thickness direction (as that the broadest reasonable interpretation of the claim language provides for two interpretations of the tool placement; for example the tool axis can be perpendicular to the thickness direction, or the tool axis can be parallel to the thickness direction as would be capable for welding the structure of Mochizuki where the thickness direction is perpendicular the length of the plates 27a,b) so as to carry out the friction stir welding and during the weld the material of the raised portion is capable of filling the gaps (see Mochizuki, abstract, purpose; where Mochizuki also discloses improved bonding of the members); having a first and second plate, which is substantially parallel to the first plate (figure 2, 1 first and 2 second parallel plates 27b and 27a); where an end portion of a second plate at a side of an end portion of said first plate of said hollow frame member having said raised portion, the hollow frame member has a further raised portion (figure 2, item 27e); where the further raised portion projects to an outer side in a thickness direction of the second plate from one side face of said second plate (figure 2, item 27f, where the side portion is the side of the plate); said further raised portion of said second plate is a portion capable of having said rotary tool inserted therein, during the friction stir welding, material of said further raised portion of the second plate fills any gaps (figure 2, 1 first and 2 second parallel plates 27b and 27a); where the plates have exposed outer faces and where the raised portion project

beyond the exposed outer faces of the first and second plates in the thickness direction (figure 2, items 27a and b); where the thickness direction is perpendicular to the exposed outer faces (figure 2, items 27a and b); where the thickness direction is a direction perpendicular to the first plate (figure 2, items 27a and b); where the first plate of hollow member has an exposed outer face and wherein the raised portion projects beyond the exposed outer face in the thickness direction (figure 2, items 27a and b); where the members are of the same material (figure 2, item 27); and a vertical plate or third plate located below the raised portion (figure 2, item 27c); wherein the third plate extends in said thickness direction (see figure 2, item 27c which extends perpendicular to the plates 27a,b in the thickness direction as previously discussed). The examiner notes that the raised portion will necessarily fill gaps between the members during the friction stir welding process. Midling et al. teach at an end portion of first and second plate adapted to be used in friction stir welding, said member has a raised portion which projects to a thickness direction, where the thickness direction is along the thickness of the length, of said member from one side face of said member (figure 5c), and said raised portion is a portion adapted to have a rotary tool inserted therein so as to carry out a friction stir welding (figure 5c, friction stir welding tool). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the structure of Mochizuki et al. to utilize friction stir welding such as disclosed in Midling et al. in order to ensure uniform homogenized weld seams (see Midling et al. page 2).

***Response to Arguments***

Applicant's arguments filed May 1, 2007 have been fully considered but they are not persuasive.

Applicant argues there is no criticality set forth in Applicant's disclosure for "exactly" uniform or "exactly" perpendicular. The examiner agrees. Applicant goes on to argue that because of this, applicant should be allowed to claim the broad range of substantially uniform and substantially perpendicular (pages 11-13). The examiner disagrees. Merely because there is no criticality does not mean that applicant can claim such a broad range. Instead, Applicant's specification must reasonably convey they had possession of the claimed invention. In the instant case, it is the examiner's position that Applicant's single embodiment showing uniform and perpendicular does not reasonably convey that Applicant had possession of the broadly claimed invention. As stated in the previous office action, applicant only has support for "uniform" and "perpendicular." Applicant does not have support for the broad range of substantially uniform and substantially perpendicular.

Applicant argues the meaning of "substantially" and continues to argue that there is sufficient disclosure within the original description to support the claimed "substantially uniform" height and width and "substantially perpendicular" abutted configuration (page 12). The examiner disagrees, and notes that "substantially" is interpreted to encompass a broad spectrum of limitations near and far from the actual or exact description. Hence, "substantially uniform" height and width also encompasses all height and widths which are non-uniform (see argument on page 13 as well); which has

not been disclosed or even suggested within Applicant's original specification. During patent examination, the pending claims must be "given the broadest reasonable interpretation." Applicant always has the opportunity to amend the claims during prosecution, and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969).

Applicant argues specific embodiments disclosed for the perpendicular configuration which Applicant believes supports the claim for "substantially perpendicular" (page 13). Applicant cites page 14 of the original specification regarding description of figure 14, which contains language including "virtually perpendicular;" and cites page 5, lines 16-20 which discloses perpendicular "as much as possible." While these encompass two specific and different embodiments of the invention which may include "virtually" or (as Applicant argues) "substantially" perpendicular configuration; Applicant has not made any disclosure or suggestion within the description to provide support that all embodiments of the invention are always "substantially" perpendicular (which includes all configurations which are not perpendicular based on the broadest reasonable interpretation of the claim language). Furthermore, even with these two specific examples of "virtually" perpendicular or perpendicular "as much as possible," the applicant has no support within the original disclosure for all of "substantially perpendicular" and "substantially uniform height" and "substantially uniform width" for each and every embodiment possible for the instant invention, or regarding the invention generally (invention as a whole, as argued by the applicant on page 14).



Therefore, claims 23-25 still maintain new matter as that they have no support within the specification for all of these claimed features combined (as instantly claimed).

Applicant also argues that the Examiner would have neither taught nor would have suggested such hollow frame member as in the present claims, and continues to list each limitation of the claims with regard to the prior art of record (pages 15-17). However, the applicant has failed to provide any reasons for arguing this and merely recites the claim language alleging that the prior art of record does not teach or suggest all of the claim limitations without providing any disclosure within the prior art which would lead one of ordinary skill in the art to believe that the claimed limitations are not taught or suggested and without providing any evidence that Applicant's claimed invention is unexpected and significantly different from the disclosure cited by the examiner in the rejection of record. The examiner disagrees and maintains that the prior art of record as combined teaches and/or suggests all of the instantly claimed limitations and points the applicant to review the rejection of record for citations of each teaching within the prior art.

Applicant argues that the references of record do not teach or suggest the structure as in the present claims, including specific features of claims 1-3, and cites that the art does not disclose "positioning thereof such that the vertical or third plate supports a load during the friction stir welding (page 17). While the examiner points out that this limitation is met by the prior art of record and discussed in the rejection above; the examiner also notes that intended use limitations of equipment or the process of achieving the desired products such as the structure of Applicant's claim, hold limited

patentable weight during the examination of apparatus or product claims, which should include structural limitations necessary to achieve the novel structure of the applicant's disclosure.

Applicant argues that the teaching of the applied reference would have neither disclosed nor would have suggested the claimed hollow frame member wherein the two recited frame members are friction stir welded to each other (page 17). The examiner disagrees and notes that these features are taught and/or suggested by the prior art of record and points the applicant to review the rejection of record above for citations of each of the teachings.

The applicant also argues that the teachings of the applied references would have neither disclosed nor would have suggested other features of the present invention as in the remaining, dependent claims, which have features as discussed previously in connection with claims 1, 2, and 3 (page 17). The examiner disagrees for all of the same reasons discussed with regard to Applicant's arguments regarding the rejection of claims 1, 2, and 3 above.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "indentations "deformation and sunken portions) in the friction stir weld joint can be substantially avoided" (page 18)) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The examiner also notes that even if Applicant claimed such use of the

friction stir welding operation (as argued on page 18), it would hold limited patentable weight during examination of the instant product claims without proper limiting the claim to only the structural features of the product itself.

In response to applicant's arguments against the references individually (with regard to Mochizuki et al. on pages 19-21 and Midling et al. on pages 21-23), one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). On page 19, Applicant argues that Mochizuki et al. does not disclose, nor would have suggested structure being friction stir welded; however, the examiner disagrees. Mochizuki et al. disclose bonding of the structural elements to arrive at the instantly claimed product. Furthermore, Midling et al. disclose friction stir welding method for joining members.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "avoiding indentations/deformations in the friction stir welded joint utilizing the hollow frame member (page 19-20)) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant argues that the structure 27e of figure 2 in Mochizuki does not project to an outer side in a thickness direction of the hollow frame member, extending beyond

the one side face in the thickness direction (page 20). The examiner disagrees. Mochizuki et al. teach an end portion of said hollow member, where the hollow frame member has a raised portion (figure 2, item 27e) which projects to an outer side in a thickness direction (vis a vis figure 2, item 27c and the opposite side) of said hollow frame member from one side of the face of said hollow frame member, extending beyond said one side face in said thickness direction (see figure 2, where thickness direction is along a direction perpendicular to plates 27b and 27a on the other plate and where element 27e extends along the thickness direction due to the width or thickness of the element 27e, noting that the width of the plates 27a,b including the raised portion 27e “extends” along the thickness direction), and is provided integrally on said end portion of the hollow frame member (figure 2, item 27a and 27b).

During patent examination, the pending claims must be “given the broadest reasonable interpretation.” Applicant always has the opportunity to amend the claims during prosecution, and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969). Applicant argues that item 27e cannot qualify as the raised portion as in the present claims, projecting to an outer side in a thickness direction of the hollow frame member from one side face of the hollow member, and extending beyond the one side face in a thickness direction (page 20). The examiner disagrees, and points out to the Applicant that Mochizuki clearly encompasses each of these limitations regarding the raised portion of the hollow frame member (as discussed directly above) based on the broadest reasonable interpretation

of the instant claim language. Furthermore, Applicant has not given any explanation of how the element 27e of Mochizuki cannot be the same as the Applicant's claimed "raised portion;" nor has the applicant provided any evidence or support to show that the instant invention is significantly different from that of the prior art.

The applicant also argues that Mochizuki et al. would have neither taught nor suggested the vertical or third plate, which supports a load during the friction stir welding (pages 20-21). In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The examiner points out the friction stir welding features of Midling in reference to similar structural features of the workpieces or frame structures within each of the prior art. Furthermore, the applicant then argues that there is no "raised portion" in Midling, and the prior art of record cannot fairly be combined to arrive at the instantly claimed invention (page 21-22). Again, in response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking the references individually where the rejections are based on combinations of references. Furthermore, Midling et al. discloses workpieces for which the friction stir welding is performed on, where the substrate includes two portions lapped over one another, where the lapped joint comprises an overhang or "raised portion" of material extending from the surface of each workpiece. See the joint in the at the friction stir welding connection of the workpieces in figure 5c.

Applicant argues that the teachings of Mochizuki and Midling individually or in combination would have neither taught nor suggested the raised portion as in the present claims (page 22). The examiner disagrees for the same reasons previously discussed with reference to both Mochizuki and Midling above, particularly with reference to the arguments against Mochizuki discusses above. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the structure of Mochizuki et al. to utilize friction stir welding such as disclosed in Midling et al. in order to ensure uniform homogenized weld seams (see Midling et al. page 2).

Applicant also argues that the two references should not be reasonably combined because they view different technologies and different problems are addressed in each (page 22). While the examiner agrees these are the factors for considering suggestion to combine references, the examiner disagrees that the two references cannot be fairly combined. The references contain sufficient suggestion to combine if they are within the same field of endeavor, or, if not, then the references are reasonably pertinent to the same problem with which each was trying to solve. The

examiner points out that both Mochizuki and Midling are relevant to the same field of endeavor, mainly, for bonding of structural members of different materials (including metals and alloys). See Mochizuki, abstract, purpose and see Midling pages 1-3.

Applicant argues that the advantages of the present invention are not taught or suggested by the prior art (page 23). The examiner disagrees for the same reasons discussed above. Furthermore, the examiner notes that the advantages of the present invention are not recited within the instant claim language. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant also argues the Midling shows a solid plate being friction stir welded, therefore the teachings of this reference alone or in combination would not suggest that claimed for the instant invention. The examiner once again reminds the applicant to review the teachings of Mochizuki with regard to the structure being bonded (friction stir welded), and in combination with the friction stir welding step of Midling would clearly suggest and/or teach each of the claim limitations as broadly written. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicant argues that Mochizuki teaches away from the hollow frame member as the present claims imply; and applicant believes that the structure of Mochizuki is not adapted to have a rotary tool inserted in the raised portion in the thickness direction

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(page 23). The MPEP states, "patents are relevant as prior art for all they contain," more specifically stating,

"The use of patents as references is not limited to what the patentees describe as their own inventions or to the problems with which they are concerned. They are part of the literature of the art, relevant for all they contain." *In re Heck*, 699 F.2d 1331, 1332-33, 216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting *In re Lemelson*, 397 F.2d 1006, 1009, 158 USPQ 275, 277 (CCPA 1968)).

A reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill the art, including nonpreferred embodiments. *Merck & Co. v. Biocraft Laboratories*, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.), *cert. denied*, 493 U.S. 975 (1989). See also *Celeritas Technologies Ltd. v. Rockwell International Corp.*, 150 F.3d 1354, 1361, 47 USPQ2d 1516, 1522-23 (Fed. Cir. 1998) (The court held that the prior art anticipated the claims even though it taught away from the claimed invention. "The fact that a modem with a single carrier data signal is shown to be less than optimal does not vitiate the fact that it is disclosed.") MPEP 2123 I.

Furthermore, the examiner does not believe that Mochizuki teaches away from the hollow structure including a configuration capable of having a rotary tool inserted in the raised portion in the thickness direction. The examiner repeats (from the rejection above) that Mochizuki discloses said raised portion of said first plate is a portion capable of having a rotary tool inserted therein in a thickness direction (as that the broadest reasonable interpretation of the claim language provides for two interpretations of the tool placement; for example the tool axis can be perpendicular to the thickness direction, or the tool axis can be parallel to the thickness direction as would be capable for welding the structure of Mochizuki where the thickness direction is perpendicular the length of the plates 27a,b) so as to carry out the friction stir welding and during the weld the material of the raised portion is capable of filling the gaps (see Mochizuki, abstract, purpose; where Mochizuki also discloses improved bonding of the members).



***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rachel E. Beveridge whose telephone number is 571-272-5169. The examiner can normally be reached on Monday through Friday, 9 am to 6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jonathan Johnson can be reached on 571-272-1177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/reb/  
20 July 2007



**JONATHAN JOHNSON**  
**PRIMARY EXAMINER**